

Work Order ID 110333***110333***

December-17-13 9:23:37 AM

Page 1

Item ID: D3655-3

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Panel

Stop

NS2

Start Date: 12/17/13 Start Qty: 2.00

2

Cust Item ID:

Required Date: 12/17/13 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan: MLSDate: 13-12-18

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3655	Rev B								

100

100

HAND FINISHING THERMOFORMING

Thermoform

Memo

0.00

Thermoforming Machine

Cut Blanks to fit frame size

X2 14/01/18 14/01/18

105

105

Dry Material

HandThermo

Memo

0.00

Hand Finishing Thermoforming

Dry Sheet as per QSI022 POLYCARBONATE

Temp: 245° FTime IN: 5:00 pm14/01/18Time OUT: 6:00 am14/01/18

X2 14/01/18 14/01/18

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____
 Part No. _____
 NCR No. _____

DISPOSITION

Rework
 Scrap
 Use-as-is
 Suspected Unapproved

AGAINST DEPARTMENT/PROCESS

Skid-tube
 Machining
 Thermoforming
 Large Fab

Crosstube
 Small Fab
 Finishing
 Composite

Water Jet
 Prod. Eng. Coor.
 Rec/Store/Packaging
 Supplier

Engineering
 Quality
 Other

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General								
	Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>				Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>	
	Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>				Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>	
	Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>				Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>	
	Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>				Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>	
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>				Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>	
	Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>				Positioned Wrong <input type="checkbox"/>		
	Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>				Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>	
	Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>						
	Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>						
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>						
	Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>						

Work Order ID 110333

December-17-13 9:23:37 AM

110333

Page 2

Item ID: D3655-3

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Panel

Stop

NS2

Start Date: 12/17/13 Start Qty: 2.00

2

Cust Item ID:

Required Date: 12/17/13 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan:

Date: _____

Tooling:

Date: _____

Run Start

NR1

QC:

Date: _____

SPC (Y/N):

Date: _____

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

110

110

Thermoform

Thermoforming Machine

THERMOFORMING MACHINE

0.00

Memo

0.00

Thermoform as per Dwg. D3655-3 and Folio FTA 017 using tool DT 8985

x2

SL
14/01/15

Dwg. Rev. B

Folio Rev. C

Visually inspect for proper formation of each part

140

140

Thermoform

Thermoforming Machine

HAND FINISHING THERMOFORMING

0.00

Memo

0.00

Trim to Finished Dimensions as per dwg D3655

x2

SL
14/01/15

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS Skid-tube <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Composite <input type="checkbox"/>
Part No. _____	Prod. Eng. Coor. <input type="checkbox"/>	Water Jet <input type="checkbox"/>
NCR No. _____	Rec/Store/Packaging <input type="checkbox"/>	Engineering <input type="checkbox"/>
	Supplier <input type="checkbox"/>	Quality <input type="checkbox"/>
	Other <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General		
Bending	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>
Centre Not Concentric	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>
Cracks	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Set-up <input type="checkbox"/>
Crimp/Kink/Ripple/Wave	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
Cuffs	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>
Crushing	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>
Heat Treat	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Part Moved <input type="checkbox"/>
Inspection Strip in Tube	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>
Marks/Chatter	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>
Turning Sequence	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>	Other <input type="checkbox"/>
Wave/Twist in Tube	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>	

Work Order ID 110333***110333***

Page 3

December-17-13 9:23:37 AM

Item ID: D3655-3

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Panel

Start Date: 12/17/13 Start Qty: 2.00

2

Cust Item ID:

Required Date: 12/17/13 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
Description

150

150

QC

Quality Control

160

160

QC

Quality Control

170

170

Packaging

Packaging

Set Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

DAS

27

9-89

0.00

14/11/15

0.00

0.00

2x

DAS

26

9-89

PPP 110245

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____
 Part No. _____
 NCR No. _____

DISPOSITION

Rework
 Scrap
 Use-as-is
 Suspected Unapproved

AGAINST DEPARTMENT/PROCESS

Skid-tube
 Machining
 Thermoforming
 Large Fab

Crosstube
 Small Fab
 Finishing
 Composite

Water Jet
 Prod. Eng. Coor.
 Rec/Store/Packaging
 Supplier

Engineering
 Quality
 Other

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General			
	Bending <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>
	Centre Not Concentric <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>
	Cracks <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
	Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>
	Cuffs <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
	Crushing <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	
	Heat Treat <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	
	Inspection Strip in Tube <input type="checkbox"/>	Misread <input type="checkbox"/>		
	Marks/Chatter <input type="checkbox"/>	Off-set <input type="checkbox"/>		
	Turning Sequence <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>		
	Wave/Twist in Tube <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>		

Work Order ID 110333

110333

Page 4

December-17-13 9:23:38 AM

Item ID: D3655-3

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Panel

Stop

NS2

Start Date: 12/17/13 Start Qty: 2.00

2

Cust Item ID:

Required Date: 12/17/13 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Quality Control

Memo

0.00

PL 14-01-15
MF
14-1-25

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

<p>Work Order: _____</p> <p>Part No. _____</p> <p>NCR No. _____</p>	DISPOSITION <input type="checkbox"/> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved	AGAINST DEPARTMENT/PROCESS <input type="checkbox"/> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier
		<input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other	

Picklist Print

December-17-13 9:23:37 AM

Page 1

Work Order ID: 110333

Parent Item: D3655-3

Parent Item Name: Panel

Start Date: 12/17/13

Required Date: 12/17/13

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev. A 07/12/13 New Issue DL verified by:DD
IPP Rev. B 08/09/25 Dwg. Update DL
Material 10/04/21 DL

IPP Rev. C Add Step 105 Dry

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.093-F6006-07 GE PLASTICS LEXAN SHEET		Purchased	No			100	sf	2,039.9200	34.66	70			

Location	Loc Qty	Loc Code
MAT023	2039.92	
114459	229.26	
123105	77.34	
124501	1733.32	

14/01/15

70 -27.41

DQA: _____ Date: _____

Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Date:

Work Order update only

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>			Engineering <input type="checkbox"/>		
Part No. _____			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>			Quality <input type="checkbox"/>		
NCR No. _____			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>			Other <input type="checkbox"/>		
Suspected Unapproved <input type="checkbox"/>		Large Fab <input type="checkbox"/>		Composite <input type="checkbox"/>		Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector
Design											
Doc/Data											
Equip/Tooling											
Handling/Pre											
Material											
Operator											
Offset/Setup											
Process											
Supplier											
Training											
Transport											
Unapproved											
FAULT CATEGORY											
Landing Gear			General								
			Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>			Pressure/Forced <input type="checkbox"/>		
			Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>			Set-up <input type="checkbox"/>		
			Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>			Temperature/Cure <input type="checkbox"/>		
			Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>			Weld <input type="checkbox"/>		
			Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>			Wrong Stock Pulled <input type="checkbox"/>		
			Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>					
			Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>			Other <input type="checkbox"/>		
			Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>						
			Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>						
			Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>						
			Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>						

DART AEROSPACE LTD	Work Order:	110333
Description: Panel	Part Number:	D3655-3
Inspection Dwg: D3655	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than <u>1/16"</u>				
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by:

Date: 14/01/14

TRIMMING SECTION

Measu

DAS

Date:

14/edas-5

Audited by

27

Date:

14/11/15

Prototype Approval:

N/A

Date: N/A

Rev	Date	Change	Revised by	Approved
A	09.06.11	New Issue	KJ	







